

CA1
BS1
1999
R125

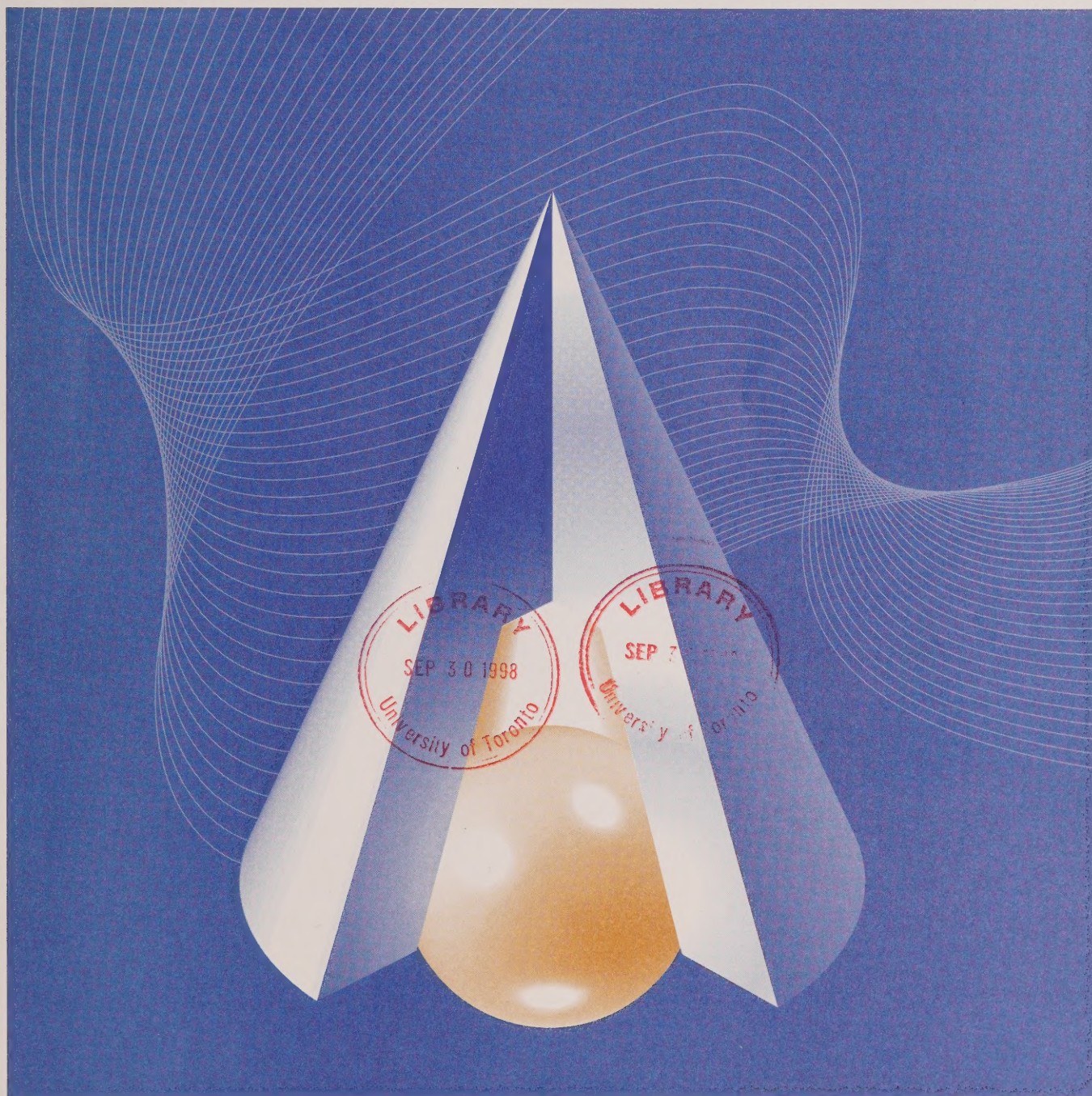
Research Paper Series

Analytical Studies Branch

Employment Insurance in Canada: Recent Trends and Policy Changes

by Zhengxi Lin

No. 125



Statistics
Canada

Statistique
Canada

Canada

ANALYTICAL STUDIES BRANCH RESEARCH PAPER SERIES

The Analytical Studies Branch Research Paper Series provides for the circulation, on a pre-publication basis, of research conducted by Branch staff, visiting Fellows and academic associates. The Research Paper Series is intended to stimulate discussion on a variety of topics including labour, business firm dynamics, pensions, agriculture, mortality, language, immigration, statistical computing and simulation. Readers of the series are encouraged to contact the authors with comments, criticisms and suggestions. A list of titles appears inside the back cover of this paper.

Papers in the series are distributed to Statistics Canada Regional Offices, provincial statistical focal points, research institutes, and speciality libraries. These papers can be downloaded from the internet at www.statcan.ca.

To obtain a collection of abstracts of the papers in the series and/or copies of individual papers (in French or English), please contact:

Publications Review Committee
Analytical Studies Branch, Statistics Canada
24th Floor, R.H. Coats Building
Ottawa, Ontario, K1A 0T6
(613) 951-6325

Employment Insurance in Canada: Recent Trends and Policy Changes

by

Zhengxi Lin

No. 125

11F0019MPE No.125

ISSN: 1200-5223

ISBN: 0-660-17606-8

Price: \$5.00 per issue, \$25.00 annually

Business and Labour Market Analysis
24 -H, R.H. Coats Building, Ottawa, K1A 0T6
Statistics Canada (613) 951-0830
Facsimile Number: (613) 951-5403
E-mail: linzhen@statcan.ca

September 1998

A longer version of this paper is published in Canadian Tax Journal, April 1998 (Vol. 46, No. 1). I would like to thank Miles Corak, Garnett Picot, Wendy Pyper and Myles Zyblock for valuable discussions and comments. I would also like to thank the review committee of Canadian Tax Journal for helpful comments and suggestions. Errors remaining are my own responsibility.

This paper represents the views of the author and does not necessarily reflect the opinions of Statistics Canada.

Aussi disponible en français



Digitized by the Internet Archive
in 2023 with funding from
University of Toronto

<https://archive.org/details/31761116347543>

Table of Contents

<i>1. Introduction</i>	<i>1</i>
<i>2. Recent Trends in Employment Insurance</i>	<i>1</i>
<i>3. Evolution of the Employment Insurance System</i>	<i>5</i>
<i>4. Summary and Conclusion</i>	<i>13</i>
<i>Bibliography</i>	<i>17</i>

Abstract

This paper highlights recent trends in employment insurance (formerly unemployment insurance). It also provides a review of the historic evolution of the employment insurance program. The following summarizes the main results.

1. The EI system has turned from large deficits prior to 1993, to nearly balancing the books in that year, and further to substantial surpluses ever since. This is attributable to many factors. Premium contributions collected from employees and employers have been stable at a historically high level since 1994 largely thanks to the recovery of the economy. On the other hand, benefit payouts have steadily declined since 1993 mainly due to a falling number of beneficiaries since 1993, benefit rate reduction from 60% to 57% in 1993 and further to 55% in 1994 except for low income claimants with dependents (back up 60%).
2. The declining number of beneficiaries is in turn attributable to many factors. Unemployment as well as the unemployment rate has been falling since 1993 (there was a slight increase in 1996). Characteristics of the unemployed may have changed. There has also been a series of significant changes in policy parameters regarding benefit eligibility since 1990.
3. Over the course of its nearly sixty years of existence, the EI system has undergone numerous changes. Most significantly, the 1971 UI Act which widely liberalized the pre-1971 system; a series of subsequent fine-tuning and tightening-up; and the abolishment of minimum hours/earnings coverage requirements (all employees are now covered), as well as the name change to "employment insurance" from "unemployment insurance".

Keywords: Employment insurance; benefits; premiums
JEL classification: J65; H71

I. Introduction

The objective of this paper is to highlight recent trends in the employment insurance (EI) program. EI (formerly unemployment insurance or UI) has again attracted increasing public attention lately mainly because the system has turned around from substantial deficits to large surpluses since 1994. Given that the EI fund is self-financing, it is natural that there is vigorous public debate regarding what to do with this large sum of surplus. Some argue that the benefit level be raised. Others prefer premium rate reduction to stimulate job creation by providing businesses and their employees with relief from payroll tax burden. Still others favour the use of this surplus to reduce unemployment through direct government job-creation action, to enhance training for the unemployed, and to provide financial assistance to those who want to set up businesses.

The fund's substantial surplus is attributable to many factors. Premium revenues collected from employees and employers rose to around \$19 billion per year since 1994 largely thanks to the recovery of the economy. On the other hand, benefit payouts have steadily declined since 1993 mainly due to the falling number of beneficiaries since 1993 and a benefit rate reduction in 1993 and 1994. The declining number of beneficiaries is again the result of many factors. The number of unemployed as well as the unemployment rate has been falling since 1993, at least up to 1996. Characteristics of the unemployed may have changed, resulting in a higher proportion of the unemployed who were not covered by the program or a higher proportion of the unemployed who are covered but not eligible for benefits. Take-up rates among the eligible unemployed may have declined. The proportion of long-term unemployed may have increased.

A series of changes in policy parameters regarding benefit eligibility since 1990 have also contributed to the falling number of beneficiaries. For instance, the entrance requirement was raised first in 1990 and again in 1994. Those who quit without just cause or are dismissed because of misconduct or refuse to accept suitable employment were completely disqualified for benefits since 1993. Therefore, the paper also attempts to highlight, in a comprehensive manner, policy changes in the EI program over its 60 years of existence.

2. Recent Trends in Employment Insurance

This section reports some of the recent trends in the EI system, including turning from large deficits to substantial surpluses and falling number of beneficiaries.

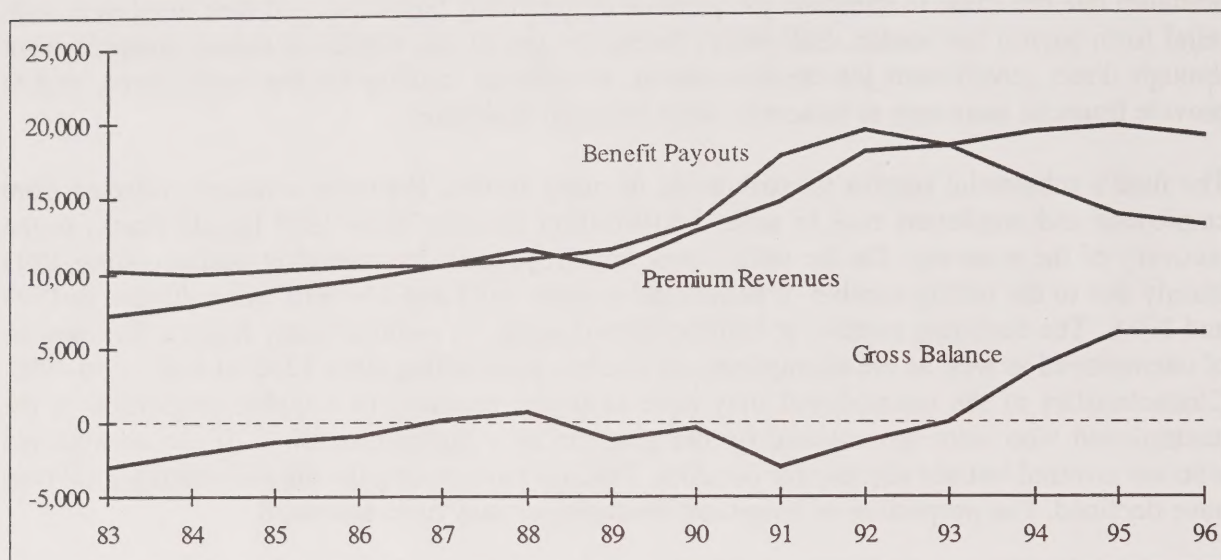
EI Fund Running Substantial Surplus since 1994

The employment insurance (EI) system has turned from large deficits prior to 1993, to nearly balancing the books in that year, and further to substantial surpluses ever since. Prior to 1993, benefit payouts exceeded premium revenues, substantially in some cases, and the fund's gross balance¹ was in red for every year except 1987 and 1988. For example, the gross deficit was

¹ EI financing has changed very significantly over the years. The cost of the program was shared between employees, employers and the federal government prior to 1990. Since 1990, federal government's responsibilities were eliminated and the Fund became self-financing --- the entire cost of the system was shared between employers and employees (see next section for details). In order for the time series to be consistent over time, federal government's contributions to the fund prior to 1990 are thus excluded in calculating the gross balance, i.e., only premiums collected from employees and employers are included as revenues throughout the entire study period. Operating costs

around \$3 billion in both 1983 and 1991, over \$2 billion in 1984, and close to \$1.4 billion in both 1985 and 1992. However, the system turned around in 1993 — nearly balanced the books in that year and has enjoyed substantial surpluses ever since. The gross surplus was over \$3.5 billion in 1994 and close to \$6 billion in both 1995 and 1996 (Figure 1).

Figure 1: EI Premium Revenues, Benefit Payouts and Gross Balance (millions of dollars), 1983 – 1996



Source: Employment Insurance Statistics, Statistics Canada.

These large amounts of surplus are attributable to many factors. On the revenue side, premium revenues collected from employees and employers rose to around \$19 billion per year since 1994 largely thanks to the recovery of the economy. On the cost side, after reaching the peak of over \$19 billion in 1992, benefit payouts steadily declined to \$13 billion by 1996.

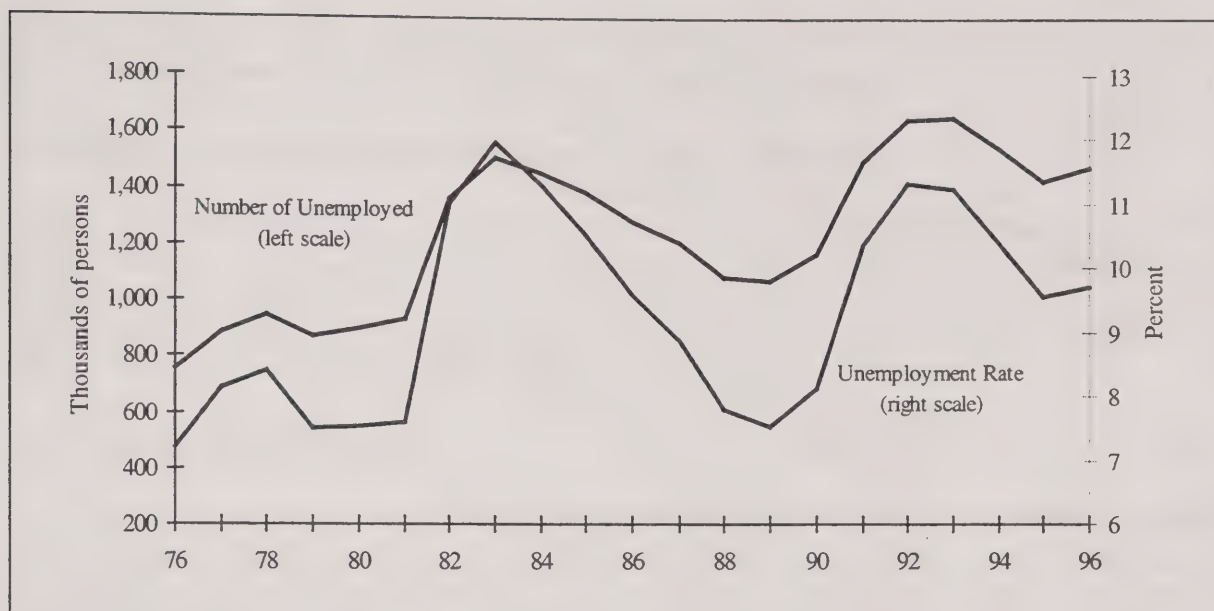
Declining benefit payouts are in turn attributable to many factors. The number of beneficiaries has significantly declined since 1993.² The replacement rate was reduced from 60% to 57% in 1993, and further to 55% in 1994 except for low-income claimants with dependents (back up to

of the system are also not included in calculating the gross balance. Inclusion of operating costs would somewhat alter the net balance picture --- bigger deficits and smaller surpluses.

² The unemployed population can be divided into those who receive benefits and those who do not. Beneficiaries can further be divided into those receiving regular benefits and those receiving special benefits (sickness, maternity, parental, adoption, retirement, fishing, work sharing, job creation, training and self-employment assistance). Note that special beneficiaries are not necessarily unemployed. Non-beneficiaries can further be classified into 4 mutually exclusive groups: i) those who are not covered by the system (i.e., insufficient hours/earnings for meeting the minimum coverage requirement); ii) those who are covered by the program but ineligible for benefits (i.e., insufficient weeks of insurable employment for meeting the VER or quitting without just cause or being dismissed because of misconduct or refusing to accept suitable employment); iii) those who are eligible for benefits but do not make a claim; and iv) those long-term unemployed who have exhausted their benefit entitlement. Any change in the characteristics of the unemployed and/or policy parameters will affect some or all of these components, and thus result in change in the number of beneficiaries and the ratio of beneficiaries to the unemployed.

60%). The falling number of beneficiaries is again the result of many factors such as falling unemployment and the unemployment rate (Figure 2), changes in the characteristics of the unemployed, and/or changes in policy parameters to which we will turn in the next section.

Figure 2: Number of Unemployed and Unemployment Rate, 1976 – 1996



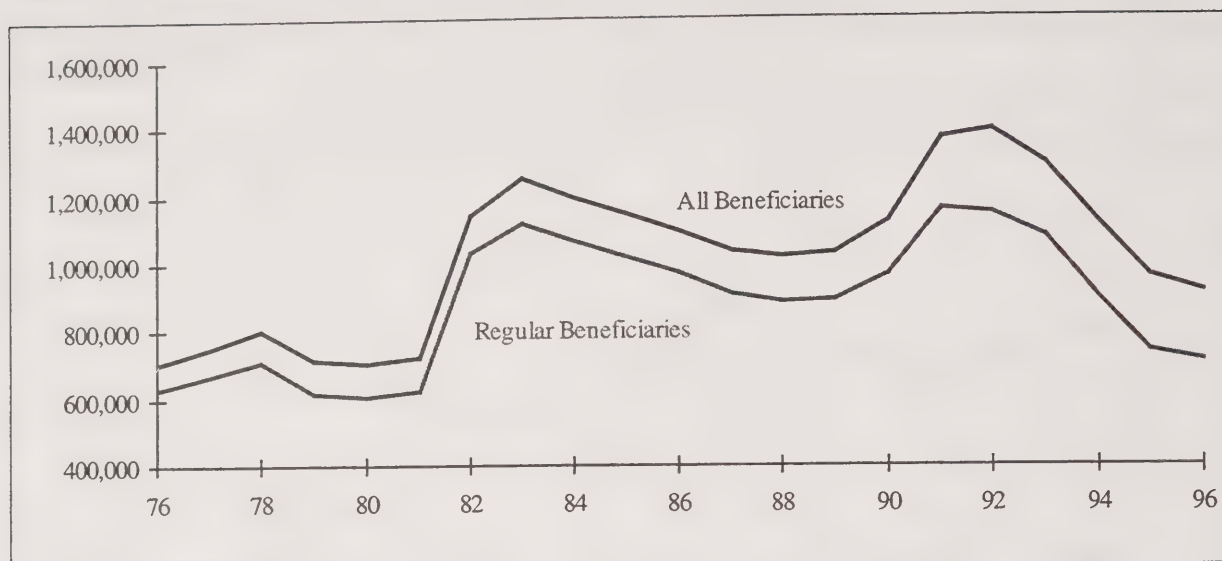
Source: Labour Force Survey, Statistics Canada.

Declining Number of Beneficiaries

As noted earlier, one of the direct factors contributing to the turn-around of the EI fund is that the number of beneficiaries has been in decline since the early 1990s. The number of all beneficiaries reached the peak of 1.39 million in 1992, and has been falling ever since to 0.91 million by 1996. And the number of beneficiaries receiving regular benefits reached the peak of 1.16 million in 1991. It has also been in steady decline to 0.71 million by 1996 (Figure 3).

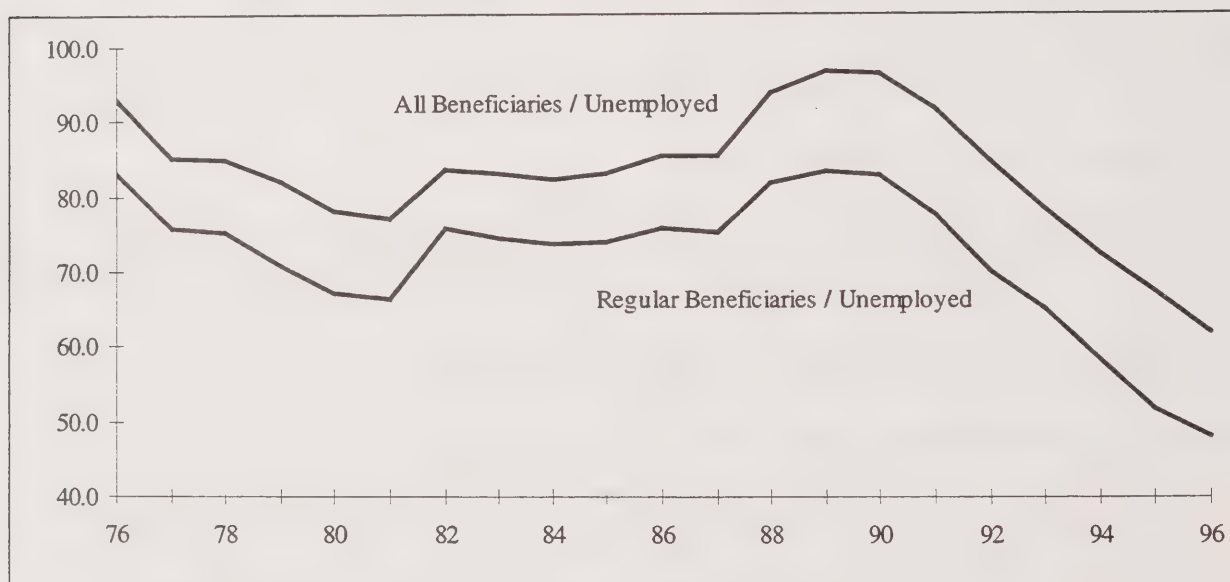
The decline happened even earlier when the number of beneficiaries is expressed as the ratio to the number of the unemployed. The ratio of all beneficiaries to the unemployed peaked in 1989 at 96.7%, and has ever since been rapidly falling to only 62.0% by 1996. The ratio of regular beneficiaries to the unemployed also peaked in 1989 at 83.4%. It has also been rapidly declining since 1990 and reached 48.1% by 1996 (Figure 4).

Figure 3: Number of EI Beneficiaries, 1976 – 1996



Source: CANSIM, Statistics Canada.

Figure 4: Ratio of EI Beneficiaries to Unemployed, 1976 – 1996



Source: CANSIM and Labour Force Survey, Statistics Canada.

There are many reasons why the number of beneficiaries has been steadily falling. There may have been changes in the characteristics of the unemployed. For example, the proportion of workers with short hours/low earnings may have increased, resulting in a higher proportion of the unemployed who are not covered by the program. The proportion of workers with short employment duration or the number of voluntary quitters (dismissals) may have increased, leading to a higher proportion of the unemployed who are not eligible for benefits. Take-up rates among the unemployed who are eligible for benefits may have declined. And the proportion of long-term unemployed may have increased.

There have also been significant changes in policy parameters that can substantially affect the number of beneficiaries. For instance, the variable entrance requirement (VER) was raised from 10-14 weeks to 10-20 weeks in 1990, and further to 12-20 weeks in 1994. Those who quit without just cause or are dismissed because of misconduct or refused to accept suitable employment were completely disqualified for benefits since 1993.

Assessing the significance of each of these changes and their impacts on the system is beyond the scope of this paper, we now turn to policy changes in the EI program.

3. Evolution of the Employment Insurance System

Employment insurance (formerly unemployment insurance) was first enacted in Canada in 1940. Over the course of its nearly sixty years of existence, the system has undergone numerous changes. Most significantly, the 1971 UI Act which widely liberalized the pre-1971 system; a series of subsequent fine-tuning and tightening-up; and the abolishment of minimum hours/earnings coverage requirements as well as the name change to “employment insurance”.

The System Prior to 1971

After an amendment to the British North America Act, bringing matters of unemployment insurance and placement of persons under the federal jurisdiction, Parliament passed Canada’s first Unemployment Insurance Act on August 7, 1940. The main objectives were to provide financial assistance to unemployed persons, to find suitable employment for Canadians, to move people from areas of high to low unemployment, and to provide aid to the disadvantaged.

The UI Act of 1940 made coverage compulsory except certain industries, professional services, government services, casual employees, and persons with annual earnings over \$2,000. During the first year of operation the system covered approximately 2.5 million workers, representing about 42% of the workforce.

The Act was administered by the UI Commission. Contributions into the UI Fund commenced on July 1, 1941. The federal government paid for the administration of the program plus 20% of the employee and employer combined contributions. The first date on which claimants could qualify for benefits was January 27, 1942.

In order to be eligible for benefits, claimants had to furnish proof that they were unemployed, available for work (except for attendance in approved training), capable of employment, and had contributed into the Fund for at least 180 days during a two-year period prior to the claim. Persons were disqualified from receiving benefits for up to six weeks if they had left their employment without just cause, refused to accept suitable employment, or were dismissed for misconduct. In addition, persons who were directly involved in labour disputes were disqualified from receiving benefits.

Main changes to the system in the 1940s included enactment of provisions to assist persons discharged from the Armed Forces in 1941; transferring the administration of the Act to the Department of Labour in 1942; raising the annual earnings ceiling to \$2,400 in 1943; and continual expansion in coverage and increase in benefits. By the end of the 1940s, the system covered

approximately 50% of the workforce, and the maximum weekly benefits rose to \$18.30 for claimants with dependents and \$14.40 for claimants without dependents.

The system continued to evolve throughout the 1950s. The amendments of February 1950 provided supplementary or seasonal benefits to persons ineligible for regular benefits. The special benefits were available at the rate of 80% of regular benefits between January 1 and March 31, to individuals who had exhausted their benefit rights since the preceding March 31, or to persons who had at least 90 days of insurable employment since that date. In July 1950, regulations regarding repeat claimants were somewhat relaxed. In 1952, the waiting period was reduced to 5 days, and the supplementary benefits period was extended to April 15. In August 1953, the Act was amended to provide for the continuation of benefit payments in case the claimant became ill after the claim had started. The new UI Act was passed on October 2, 1955, introducing a series of changes to benefit rates, contributions, duration of benefit payments, allowable earnings while on claim, seasonal benefits (the benefit rate was increased to that of regular benefits), and coverage. In September 1956, regulations regarding repeat claimants were totally relaxed, and eligibility requirement was reduced from 30 weeks to 24 weeks of insurable employment in the past year or since the last claim. By the end of the 1950s, maximum weekly benefits advanced to \$36.00 for claimants with dependents, and \$27.00 for claimants without dependents; maximum weekly insurable earnings increased to \$69.00; maximum weekly contributions rose to \$0.94; the coverage earnings ceiling went up to \$5,460; the maximum benefit entitlement increased to 52 weeks. In addition, coverage was extended to self-employed fishermen. To encourage claimants to seek employment they were now permitted to earn up to 50% of their weekly benefits without penalty.

The system remained relatively stable during the 1960s. No major legislative amendments were made except some administrative changes. Following the release of the "Report of the Committee of Inquiry into the Unemployment Insurance Act" (the "Gill Report") in 1962, the government undertook some administrative changes. In April 1965, the duties and functions of the employment service became the responsibility of the Minister of Labour. Further integration of manpower policies and programs resulted in the creation of the Department of Manpower and Immigration. On October 1, 1966, the employment service was transferred to this new department. By the end of the 1960s, the system's coverage had expanded to about 68% of the workforce.

The System Since 1971

Major institutional changes to the system were enacted by the Unemployment Insurance Act of 1971. Passed on June 27, 1971, one major objective of this new UI Act was to provide "adequate" income support for all persons experiencing temporary earnings interruptions. This new legislation widely liberalized the pre-1971 system. Among other things, it provided nearly universal coverage, eased eligibility, and added a host of new special benefits such as sickness, maternity and retirement benefits. Since the 1971 generous reforms, the system has experienced a series of subsequent fine-tuning and tightening-up. What follows highlights these main legislative changes in terms of key coverage, benefit and contribution parameters, while the Appendix provides a chronology of main legislation.

Coverage Requirement

Under the UI Act of 1971, the coverage was nearly universal, effective February 2, 1972. The only exclusions were i) the self-employed except self-employed fishermen who were covered for income

support during the off season under separate regulatory rules; ii) employees who did not meet the minimum weekly earnings requirement, which was set at 20% of the maximum weekly insurable earnings. This coverage requirement applied to each job separately. Earnings could not be summed up across different jobs to meet this requirement. For example, an employee who held many different jobs, none of which separately met the requirement but well above the earnings threshold if taken together, was not covered by the system.

A weekly hours of work dimension was added to the minimum coverage requirement since 1979. It was set at 20 hours a week or 20% of the weekly maximum insurable earnings for 1979 and 1980; 15 hours a week and 20% of the weekly maximum insurable earnings between 1981 and 1986; and 15 hours a week or 20% of the weekly maximum insurable earnings since 1987. Effective January 1, 1997, this minimum weekly hours/earnings coverage requirement was abolished and every hour of work is insured.

Eligibility, Entrance Requirement and UI Regions

Under the UI Act of 1971, a minimum of 8 weeks of insurable employment during the 52 weeks immediately preceding the claim (qualifying period) was required for regular benefits, and 20 weeks for special benefits. On December 4, 1977, the minimum of 8 weeks of insurable employment eligibility requirement was replaced by the Variable Entrance Requirement (VER). Depending on the unemployment rate prevailing in the region of residence, the claimant was now required to have 10 to 14 weeks of insurable employment during the qualifying period to become eligible for benefits. Effective July 1, 1979, new- and re-entrants were required to accumulate 20 weeks of insurable employment during the qualifying period to qualify for benefits. Repeat claimants (those who had a claim in the past 52 weeks) in regions with the unemployment rate below 11% were required to have up to 6 weeks of insurable employment in addition to the VER. On February 11, 1990, the recurring legislation that permits the VER failed to pass the Senate. The entrance requirement reverted to a uniform of 14 weeks nation-wide. Bill C-21 came into force on November 18, 1990. Repeat claimants were no longer required to work up to 6 additional weeks. The VER rose from 10-14 weeks to 10-20 weeks depending on the regional unemployment rate. Effective July 7, 1994, Bill C-17 raised the VER from 10-20 weeks to 12-20 weeks, depending on the regional unemployment rate (see Table 1). Effective January 1, 1997, the VER based on weeks of insurable employment was replaced by an entrance requirement based on hours of work.

When the VER was first implemented in 1977, the regional unemployment rate was based on 16 UI economic regions (established under the UI Act of 1971). Under Bill C-27, the number of UI regions was raised to 48, effective November 11, 1978. Bill C-21 further raised the number of UI regions to 62, effective November 18, 1990.

Table 1: Employment Insurance Variable Entrance Requirement

Regional Unemployment Rate	Minimum Weeks of Insurable Employment		
	Bill C-27 (Effective Dec. 4, 1977)	Bill C-21 (Effective Nov. 18, 1990)	Bill C-17 (Effective July 7, 1994)
Under 6%	14	20	20
6% - 7%	13	19	19
7% - 8%	12	18	18
8% - 9%	11	17	17
9% - 10%	10	16	16
10% - 11%		15	15
11% - 12%		14	14
12% - 13%		13	13
13% - 14%		12	12
14% - 15%		11	
15%+		10	

The Replacement (Benefit) Rate

The UI Act of 1971 set the replacement rate at 75% of insurable earnings for claimants with dependents, and at 66.67% for claimants without dependents. Effective January 1, 1976, Bill C-69 reduced the replacement rate for claimants with dependents to 66.67%. Effective January 1, 1979, Bill C-14 further lowered the replacement rate to 60%. Effective April 4, 1993, Bill C-113 reduced the replacement rate for new claimants to 57%. And effective July 7, 1994, Bill C-17 raised the replacement rate for low income claimants (those with weekly earnings less than half of the maximum insurable earnings) and claimants with dependents to 60%, but lowered it to 55% for others. Effective January 1, 1997, the base used to calculate the amount of benefit was changed to the average earnings over the 20 weeks preceding the claim, regardless the claimant was working or not.

The Maximum Benefit Period and Benefit Phases

Under the UI Act of 1971, the maximum benefit period could not exceed 51 weeks (except for persons participating in approved training). Bill C-27 reduced it to 50 weeks, effective September 11, 1977.

Under the UI Act of 1971, benefits were paid out in five phases: The 1st phase provided 8-15 weeks of benefits; the 2nd phase 10 weeks; the 3rd phase up to 18 weeks for claimants with a strong labour force attachment; the 4th phase (National Extended Benefits) up to 8 weeks depending upon the national unemployment rate (evaluated once benefit weeks granted in phases 1-3 were exhausted); and the 5th phase (Regional Extended Benefits) up to 18 weeks depending upon the regional unemployment rate and the difference between the regional and national unemployment rate (evaluated once benefit weeks granted in phases 1-4 were exhausted) (see Table 2).

Table 2: EI Benefit Period during Different Benefit Phases

Phase	Weeks of Insurable Employment	Weeks of Benefit Eligibility
1 st	8 - 15	8
	16	9
	17	10
	18	11
	19	12
	20+	15
2 nd	8+	10
3 rd	20	2
	21 - 22	3
	23 - 24	4
	2 weeks intervals	1 extra week of benefits for each 2 additional weeks of insurable employment
	51 - 52	18
4 th	National Unemployment Rate	Weeks of Benefit Eligibility
	Under 4%	0
	4% - 5%	4
	5%+	8
5 th	Weeks of Benefits	Benefits cease if one of the conditions is satisfied
	1 - 6	1) The regional unemployment rate drops to under 4%; 2) The difference between the regional and national unemployment rate drops to under 1 percentage point; 3) At the end of the 6th week, the difference between the regional and national unemployment rate drops to under 2 percentage points.
	7 - 12	1) The regional unemployment rate drops to under 4%; 2) The difference between the regional and national unemployment rate drops to under 2 percentage points; 3) At the end of the 12th week, the difference between the regional and national unemployment rate drops to under 3 percentage points.
	13 - 18	1) The regional unemployment rate drops to under 4%; 2) The difference between the regional and national unemployment rate drops to under 3 percentage point;

Effective September 11, 1977, a 3-phased structure replaced the 5-phased benefits: Phase 1 provided up to 25 weeks of benefits --- one week of benefits for each week of insurable employment; Phase 2 (Labour Force Extended Benefits) a maximum of 13 weeks of benefits for each two weeks of insurable employment beyond 26 weeks; Phase 3 (Regional Extended Benefits) up to a maximum of 32 weeks of benefits --- 2 weeks of benefits for each 0.5 percentage point increment in the regional unemployment rate in excess of 4%.

Effective November 18, 1990, the 3-phased benefit period structure was replaced by a single benefit schedule based on the number of weeks of insurable employment and the regional unemployment rate (see Table 3). Effective April 3, 1994, the benefit duration based on the single benefit schedule changed to a two-component system: 1) the work component --- providing up to 20 weeks of benefits (1 week of benefits for every two weeks of work for the first 40 insured weeks) and up to 12 additional weeks of benefits (1 week of benefits for each additional week of work beyond 40); 2) the regional component --- up to 26 weeks of benefits (2 weeks of benefits for every percentage point by which the regional unemployment rate in excess of 4%). The maximum benefit entitlement remained at 50 weeks.

Disqualification and Penalty

Under the UI Act of 1971, claimants could be disqualified for a maximum of 3 weeks of benefits for quitting without just cause, dismissals because of misconduct, refusal to accept suitable employment, failure to attend a placement interview, or refusal to follow instructions from personnel handling their claims. And weeks of disqualification counted as weeks of benefit in calculating the maximum weeks of entitlement. Effective January 1, 1976, the penalty was raised to 6 weeks. Effective November 18, 1990, the penalty was further raised to 7-12 weeks and the replacement rate dropped to 50% for these claimants. Effective April 4, 1993, those who quit without just cause, are fired because of misconduct, or refuse to accept suitable employment became ineligible for benefits altogether.

Earnings, Benefit Claw-Back and Penalty for Repeat Users

Under the UI Act of 1971, a beneficiary could earn up to 25% of benefits without penalty. Effective January 1, 1979, a benefit claw-back was introduced to retrieve benefits for high-income recipients. Claimants with net income in excess of 1.5 times the annual maximum insurable earnings were required to repay 30% of the benefits received.

Effective January 1, 1997, the replacement rate for repeat users dropped by 1 percentage point for each 20 weeks of EI use in the past 5 years, up to the maximum of 5 percentage points. In addition, repeat claimants faced a benefit claw-back of up to 100% if their earnings were in excess of the maximum insurable earnings. The extent of the claw-back depends on the number of weeks of EI use in the past 5 years.

Financing and Contributions

Under the UI Act of 1971, the costs of the system were shared between employers, employees and the federal government. Employers, being assessed at 1.4 times the employee premium rate since 1972 (equal premium rate prior to 1972 which varied with employees' levels of earnings), and their employees were deemed responsible for the following costs: administration, special benefits, regular benefits attributable to a level of national unemployment rate of up to 4%. The federal government assumed responsibility for costs relating to benefits paid to self-employed fishermen, payments to persons who had been granted extensions after training, benefits received by claimants in phases 4 and 5, and benefits associated with the first three phases if the national unemployment rate exceeded 4%.

Table 3: Weeks of EI Benefit Entitlement (Effective November 18, 1990)

Weeks of Work	Regional Unemployment Rate													
	< 6%	6 - 7%	7 - 8%	8 - 9%	9 - 10%	10 - 11%	11 - 12%	12 - 13%	13 - 14%	14 - 15%	15 - 16%	16%+		
10											37	39		
11										36	38	40		
12									35	37	39	41		
13								34	36	38	40	42		
14							33	35	37	39	41	43		
15						30	34	36	38	40	42	44		
16					27	31	35	37	39	41	43	45		
17				24	28	32	36	38	40	42	44	46		
18			21	25	29	33	37	39	41	43	45	47		
19		19	22	26	30	34	38	40	42	44	46	48		
20	17	20	23	27	31	35	39	41	43	45	47	49		
21	18	21	24	28	32	36	40	42	44	46	48	50		
22	19	22	25	29	33	37	41	43	45	47	49			
23	20	23	26	30	34	38	42	44	46	48	50			
24	21	24	27	31	35	39	43	45	47	49				
25	22	25	28	32	36	40	44	46	48	50				
26	22	25	28	32	36	40	44	46	48					
27	23	26	29	33	37	41	45	47	49					
28	23	26	29	33	37	41	45	47	49					
29	24	27	30	34	38	42	46	48	50					
30	24	27	30	34	38	42	46	48						
31	25	28	31	35	39	43	47	49						
32	25	28	31	35	39	43	47	49						
33	26	29	32	36	40	44	48	50						
34	26	29	32	36	40	44	48							
35	27	30	33	37	41	45	49							
36	27	30	33	37	41	45	49							
37	28	31	34	38	42	46	50							
38	28	31	34	38	42	46								
39	29	32	35	39	43	47								
40	29	32	35	39	43	47								
41	30	33	36	40	44	48								
42	30	33	36	40	44	48								
43	31	34	37	41	45	49								
44	31	34	37	41	45	49								
45	32	35	38	42	46	50								
46	32	35	38	42	46									
47	33	36	39	43	47									
48	33	36	39	43	47									
49	34	37	40	44	48									
50	34	37	40	44	48									
51	35	38	41	45	49									
52	35	38	41	45	49									

Effective 1, 1979, Bill C-14 stipulated that the cost of the Labour Force Extended Benefits was shared among employers, employees and the federal government. The cost of operating the National Employment Service was shifted to employers and employees on April 1, 1980. Later that year (July 1), employers and employees also became responsible for costs relating to all benefits paid during the initial and Labour Force Extended Benefits periods. Effective November 18, 1990, federal government's responsibilities were eliminated and the UI Fund became self-financing --- the entire cost of the system was shared between employers and employees.

The premium rate was set annually using a statutory rate as a benchmark, based on a three-year average of the program costs. The weekly maximum insurable earnings (MIEs) were set according to the industrial average wage over an eight-year period. Effective July 1, 1996, the weekly MIEs were revised to \$750 instead of \$845.

Changing Treatment of Premium Contributions

Prior to 1988, EI premiums and Canada/Quebec Pension Plan (C/QPP) contributions were treated as deductions from taxable income in calculating an individual's personal income tax. Since 1988, this treatment has been changed to the calculation of one's non-refundable tax credits. Because of different rates at which non-refundable tax credits and personal income tax are calculated, this change effected a double-taxation --- personal income tax on payroll tax. For individuals whose income is below the basic tax bracket, this change has no impact. For individuals with income above the basic bracket, however, this change implies personal income tax on EI premiums and C/QPP contributions.

For the second tax bracket, the amount of personal income tax paid on EI premiums is equal to the rate differential between the second bracket and the basic bracket times the differential between income and the bracket limit or premiums, whichever is lesser. To illustrate, consider the following two employees in 1996. A's income was \$30,500 and B's \$45,000. For simplicity of calculation, assume both paid \$1,000 in EI premiums. A's federal personal income tax paid on EI premiums was \$81.90 [i.e., = $(26\%-17\%)*(\$30,500-\$29,590)$]; B's federal personal income tax paid on EI premiums was \$90.00 [i.e., = $(26\%-17\%)*\$1,000$].³

For individuals with income falling in the top tax bracket, federal personal income tax paid on EI premiums is equal to the rate differential between the second bracket and the basic bracket times premiums plus the rate differential between the top bracket and the second bracket times the differential between income and the second bracket limit or premiums paid, whichever is lesser. Consider the example of two employees in 1996 with \$1,000 of EI premiums again. C's income was \$60,000 and D's \$65,000. C's federal personal income tax paid on EI premiums was \$114.60 [i.e., =

³ In 1996, the non-refundable tax credit rate was 17%. The federal personal income tax rate was 17% for taxable income up to \$29,590; 26% for the portion of taxable income between \$29,590 and \$59,180; and 29% for the portion of taxable income above \$59,180. Maximum EI premiums were \$1,150.76 for 52 weekly pay periods, based on insurable earnings up to \$39,000; \$1,172.89 for 53 weekly pay periods, based on insurable earnings up to \$39,750; and \$1,194.75 for 27 bi-weekly pay periods, based on insurable earnings up to \$40,500.

$(26\%-17\%)*\$1,000 + (29\%-26\%)*(\$60,000-\$59,180)$]; D's federal personal income tax paid on EI premiums was \$120.00 [i.e., $= (26\%-17\%)*\$1,000 + (29\%-26\%)*\$1,000$].⁴

The implication of changing treatment of EI premiums and C/QPP contributions from deductions to non-refundable tax credits is even more significant for the tax system when provincial personal income tax is added into the equation. Empirically assessing this impact on the Canadian tax system is beyond the scope of this paper, which requires research on EI premiums and C/QPP contributions as well as personal income at the individual level.

4. Summary and Conclusion

The EI system has turned from large deficits prior to 1993, to nearly balancing the books in that year, and further to substantial surpluses ever since. This is attributable to many factors. Premium contributions collected from employees and employers have been stable at a high level since 1994 largely thanks to the recovery of the economy and expansion of employment. On the other hand, benefit payouts have steadily declined since 1993 mainly due to falling number of beneficiaries and benefit rate reduction.

Cross-province subsidization persists in the program. Despite the large amount of surplus nationwide, all four Atlantic provinces were subsidized in 1996; the remaining six were net contributors. The degree of subsidization/contribution varies substantially across the provinces. The extent to which a province is a net recipient or net contributor can be explained to a large degree by its ratio of beneficiaries to the number of employees covered by the program relative to the national average. Cross-province variations in per-beneficiary benefits or per-employee contributions are far less significant.

Declining number of beneficiaries is attributable to many factors. Unemployment as well as the unemployment rate has been falling since 1993. Characteristics of the unemployed may have changed, resulting in a higher proportion of the unemployed who are not covered by the program or a higher proportion of the unemployed who are covered but not eligible for benefits. Take-up rates among the unemployed who are qualified for benefits may have declined. The proportion of long-term unemployed may have increased. There have also been a series of significant changes in policy parameters since 1990, which undoubtedly have contributed to the turn-around of the EI fund. Most significantly, the entrance requirement was raised first in 1990 and again in 1994. The benefit rate was reduced from 60% to 57% in 1993. And those who quit without just cause or are dismissed because of misconduct or refuse to accept suitable employment were completely disqualified for benefits in the same year.

With the continued recovery of the economy and expansion of employment as well as coverage extension to previously excluded short-hour/low-earnings workers, it is expected that premium revenues will continue to rise. On the other hand, with declining number and rate of unemployment, benefit payouts are expected to continue to fall. On the balance, it is reasonable

⁴ The personal income tax paid on C/QPP contributions can be calculated in the same fashion. The maximum C/QPP contribution was \$893.20 for employees in 1996. Self-employed individuals are not covered by the EI system and do not pay EI premiums, but they pay both the employee and employer portion of C/QPP contributions.

to project that the already-large magnitude of EI surplus will continue to grow, until the next recession at least.

Changing treatment of EI premiums and C/QPP contributions from deductions to non-refundable tax credits in 1988 has significant implications for the tax system. For people with income above the basic tax bracket, this change effected a double taxation --- personal income tax on payroll tax. While the extent to which this change has impacted the Canadian taxation system is not examined in the present paper, it can be empirically assessed through the use of income tax data at the individual level in future analysis.

Appendix: A Chronology of Unemployment (Employment) Insurance Legislation Since 1971

Legislation	Key Parameters
UI Act	<p>Effective June 27, 1971</p> <p>Generously liberalized the pre-1971 system:</p> <p>Provided nearly universal coverage (commencing Feb. 2, 1972)</p> <p>Eased eligibility</p> <p>Added a series of special benefits --- sickness, maternity and retirement</p>
Bill C-69	<p>Effective Jan. 1, 1976</p> <p>Disqualification increased from 3 to 6 weeks for those who quit without just cause, being fired because of misconduct, refused to accept suitable employment, failed to attend a placement interview, and refused to follow instructions from personnel handling their claims</p> <p>Maximum age for coverage reduced from 70 to 65</p> <p>The replacement rate reduced from 75% to 66.67% for claimants with dependents</p>
Bill C-27	<p>Effective Sept. 11, 1977</p> <p>VERs established (effective Dec. 4, 1977) based on 16 UI regions</p> <p>3-phased benefit structure replaced former 5-phased benefit structure</p> <p>Effective Nov. 11, 1978</p> <p>48 new UI regions replaced former 16 UI regions</p>
Bill C-14	<p>Effective Jan. 1, 1979</p> <p>Entrance requirement for new- and re-entrants set at 20 weeks (effective July 1, 1979)</p> <p>Entrance requirement for repeat users set at VER + up to 6 weeks in regions with the unemployment rate under 11%</p> <p>Replacement rate reduced to 60%</p> <p>Benefit claw-back introduced to retrieve benefits paid to high income recipients</p>
Bill C-156	<p>Effective Jan. 1, 1984</p> <p>Seasonal fishermen benefits modified</p> <p>Maternity benefits modified</p> <p>Adoption benefits introduced</p>
VER Legislation	<p>Feb. 11, 1990</p> <p>Failed to pass the Senate, entrance requirements reverted to a uniform of 14 weeks nation-wide</p>

Legislation	Key Parameters
Bill C-21	<p>Effective Nov. 18, 1990</p> <p>Repeat users no longer required 6 additional weeks</p> <p>Penalty increased from 6 to 7-12 weeks for quitting without just cause, dismissals because of misconduct and refusal to accept suitable employment; and replacement rate dropped to 50% for these claimants</p> <p>VER rose from 10-14 weeks to 10-20 weeks</p> <p>Single benefit schedule replaced former 3-phased structure</p> <p>Number of UI regions revised to 62</p>
Bill C-113	<p>Effective April 4, 1993</p> <p>Those who quit without just cause, were fired because of misconduct and refused to accept suitable employment became ineligible for benefits</p> <p>Replacement rate dropped to 57% from 60%</p>
Bill C-17	<p>Effective July 7, 1994</p> <p>VERs raised to 12-20 weeks</p> <p>Entitlement duration changed to work component and regional component</p> <p>Replacement rate raised to 60% for low earnings claimants and claimants with dependents; dropped to 55% for others</p>
Bill C-12	<p>Effective July 1, 1996</p> <p>System renamed to Employment Insurance (EI)</p> <p>Replacement rate for repeat users dropped by one percentage point for each 20 weeks of use in the past 5 years, up to the maximum of 5 percentage points</p> <p>Repeat claimants faced a benefit claw-back of up to 100%, depending on earnings and the weeks of benefits in the last 5 years</p> <p>Weekly maximum insurable earnings (MIEs) revised to \$750</p> <p>Effective Jan. 1, 1997</p> <p>Hours/earnings coverage requirement abolished, every hour of work insurable</p> <p>Entrance requirement and benefit entitlement based on hours of work instead of weeks</p> <p>Average earnings over the last 20 weeks used to calculate amount of benefits</p>

Bibliography

- Bédard, M. (1995), "Methodology for Predicting the Beneficiary/Unemployed Ratio (B/U Ratio)", Human Resources Development Canada: Applied Research Branch Working Paper W-95-2E.
- Corak, M. and W. Pyper (1995), Workers, Firms and Unemployment Insurance, Statistics Canada: Catalogue 73-505E.
- Franke, O. and D. Hermanutz (1997), "Employment Insurance: Returning to Insurance Principles", Canadian Business Economics, 5 (4), 61-77.
- Lévesque, J.-M. (1989), "Unemployment and unemployment Insurance: A Tale of Two Sources", Perspective on Labour and Income, Winter, 49-57.
- MacLean, B. and L. Osberg (ed, 1996), The Unemployment Crisis: All for Nought?, Montreal & Kingston: McGill-Queen's University Press.
- Sargent, T. (1995), "An Index of Unemployment Insurance Disincentives", Department of Finance Canada: Economic Studies and Policy Analysis Division Working Paper No. 95-10.
- Statistics Canada, Unemployment Insurance Statistics, Catalogue 73-001 and 73-202S.

ANALYTICAL STUDIES BRANCH
RESEARCH PAPER SERIES

No.

1. *Behavioural Response in the Context of Socio-Economic Microanalytic Simulation*, **Lars Osberg** (April 1986)
2. *Unemployment and Training*, **Garnett Picot** (1987)
3. *Homemaker Pensions and Lifetime Redistribution*, **Michael Wolfson** (August 1987)
4. *Modeling the Lifetime Employment Patterns of Canadians*, **Garnett Picot** (Winter 1986)
5. *Job Loss and Labour Market Adjustment in the Canadian Economy*, **Garnett Picot and Ted Wannell** (1987)
6. *A System of Health Statistics: Toward a New Conceptual Framework for Integrating Health Data*, **Michael C. Wolfson** (March 1990)
7. *A Prototype Micro-Macro Link for the Canadian Household Sector*, **Hans J. Adler and Michael C. Wolfson** (August 1987)
8. *Notes on Corporate Concentration and Canada's Income Tax*, **Michael C. Wolfson** (October 1987)
9. *The Expanding Middle: Some Canadian Evidence on the Deskillling Debate*, **John Myles** (Fall 1987)
10. *The Rise of the Conglomerate Economy*, **Jorge Niosi** (1987)
11. *Energy Analysis of Canadian External Trade: 1971 and 1976*, **K.E. Hamilton** (1988)
12. *Net and Gross Rates of Land Concentration*, **Ray D. Bollman and Philip Ehrensaft** (1988)
13. *Cause-Deleted Life Tables for Canada (1972 to 1981): An Approach Towards Analyzing Epidemiological Transition*, **Dhruva Nagnur and Michael Nagrodski** (November 1987)
14. *The Distribution of the Frequency of Occurrence of Nucleotide Subsequences, Based on Their Overlap Capability*, **Jane F. Gentleman and Ronald C. Mullin** (1988)
15. *Immigration and the Ethnolinguistic Character of Canada and Quebec*, **Réjean Lachapelle** (1988)
16. *Integration of Canadian Farm and Off-Farm Markets and the Off-Farm Work of Women, Men and Children*, **Ray D. Bollman and Pamela Smith** (1988)
17. *Wages and Jobs in the 1980s: Changing Youth Wages and the Declining Middle*, **J. Myles, G. Picot and T. Wannell** (July 1988)
18. *A Profile of Farmers with Computers*, **Ray D. Bollman** (September 1988)
19. *Mortality Risk Distributions: A Life Table Analysis*, **Geoff Rowe** (July 1988)
20. *Industrial Classification in the Canadian Census of Manufactures: Automated Verification Using Product Data*, **John S. Crysdale** (January 1989)
21. *Consumption, Income and Retirement*, **A.L. Robb and J.B. Burbridge** (1989)

22. *Job Turnover in Canada's Manufacturing Sector, John R. Baldwin and Paul K. Gorecki (Summer 1989)*
23. *Series on The Dynamics of the Competitive Process, John R. Baldwin and Paul K. Gorecki (1990)*
 - A. *Firm Entry and Exit Within the Canadian Manufacturing Sector.*
 - B. *Intra-Industry Mobility in the Canadian Manufacturing Sector.*
 - C. *Measuring Entry and Exit in Canadian Manufacturing: Methodology.*
 - D. *The Contribution of the Competitive Process to Productivity Growth: The Role of Firm and Plant Turnover.*
 - E. *Mergers and the Competitive Process.*
 - F. *(in preparation)*
 - G. *Concentration Statistics as Predictors of the Intensity of Competition.*
 - H. *The Relationship Between Mobility and Concentration for the Canadian Manufacturing Sector.*
24. *Mainframe SAS Enhancements in Support of Exploratory Data Analysis, Richard Johnson, Jane F. Gentleman and Monica Tomiak (1989)*
25. *Dimensions of Labour Market Change in Canada: Intersectoral Shifts, Job and Worker Turnover, John R. Baldwin and Paul K. Gorecki (1989)*
26. *The Persistent Gap: Exploring the Earnings Differential Between Recent Male and Female Postsecondary Graduates, Ted Wannell (1989)*
26. *Estimating Agricultural Soil Erosion Losses From Census of Agriculture Crop Coverage Data, Douglas F. Trant (1989)*
28. *Good Jobs/Bad Jobs and the Declining Middle: 1967-1986, Garnett Picot, John Myles, Ted Wannell (1990)*
29. *Longitudinal Career Data for Selected Cohorts of Men and Women in the Public Service, 1978-1987, Garnett Picot and Ted Wannell (1990)*
30. *Earnings and Death-Effects Over a Quarter Century, Michael Wolfson, Geoff Rowe, Jane F. Gentleman and Monica Tomiak (1990)*
31. *Firm Response to Price Uncertainty: Tripartite Stabilization and the Western Canadian Cattle Industry, Theodore M. Horbulyk (1990)*
32. *Smoothing Procedures for Simulated Longitudinal Microdata, Jane F. Gentleman, Dale Robertson and Monica Tomiak (1990)*
33. *Patterns of Canadian Foreign Direct Investment Abroad, Paul K. Gorecki (1990)*
34. *POHEM - A New Approach to the Estimation of Health Status Adjusted Life Expectancy, Michael C. Wolfson (1991)*
35. *Canadian Jobs and Firm Size: Do Smaller Firms Pay Less?, René Morissette (1991)*
36. *Distinguishing Characteristics of Foreign High Technology Acquisitions in Canada's Manufacturing Sector, John R. Baldwin and Paul K. Gorecki (1991)*
37. *Industry Efficiency and Plant Turnover in the Canadian Manufacturing Sector, John R. Baldwin (1991)*

38. *When the Baby Boom Grows Old: Impacts on Canada's Public Sector, Brian B. Murphy and Michael C. Wolfson (1991)*
39. *Trends in the Distribution of Employment by Employer Size: Recent Canadian Evidence, Ted Wannell (1991)*
40. *Small Communities in Atlantic Canada: Their Industrial Structure and Labour Market Conditions in the Early 1980s, Garnett Picot and John Heath (1991)*
41. *The Distribution of Federal/Provincial Taxes and Transfers in Rural Canada, Brian B. Murphy (1991)*
42. *Foreign Multinational Enterprises and Merger Activity in Canada, John Baldwin and Richard Caves (1992)*
43. *Repeat Users of the Unemployment Insurance Program, Miles Corak (1992)*
44. *POHEM -- A Framework for Understanding and Modeling the Health of Human Populations, Michael C. Wolfson (1992)*
45. *A Review of Models of Population Health Expectancy: A Micro-Simulation Perspective, Michael C. Wolfson and Kenneth G. Manton (1992)*
46. *Career Earnings and Death: A Longitudinal Analysis of Older Canadian Men, Michael C. Wolfson, Geoff Rowe, Jane Gentleman and Monica Tomiak (1992)*
47. *Longitudinal Patterns in the Duration of Unemployment Insurance Claims in Canada, Miles Corak (1992)*
48. *The Dynamics of Firm Turnover and the Competitive Process, John Baldwin (1992)*
49. *Development of Longitudinal Panel Data from Business Registers: Canadian Experience, John Baldwin, Richard Dupuy and William Penner (1992)*
50. *The Calculation of Health-Adjusted Life Expectancy for a Canadian Province Using a Multi-Attribute Utility Function: A First Attempt, J.-M. Berthelot, R. Roberge and M.C. Wolfson (1992)*
51. *Testing The Robustness of Entry Barriers, J. R. Baldwin and M. Rafiquzzaman (1993)*
52. *Canada's Multinationals: Their Characteristics and Determinants, Paul K. Gorecki (1992)*
53. *The Persistence of Unemployment: How Important were Regional Extended Unemployment Insurance Benefits? Miles Corak, Stephen Jones (1993)*
54. *Cyclical Variation in the Duration of Unemployment Spells, Miles Corak (1992)*
55. *Permanent Layoffs and Displaced Workers: Cyclical Sensitivity, Concentration, and Experience Following the Layoff, Garnett Picot and Wendy Pypers (1993)*
56. *The Duration of Unemployment During Boom and Bust, Miles Corak (1993)*
57. *Getting a New Job in 1989-90 in Canada, René Morissette (1993)*
58. *Linking Survey and Administrative Data to Study Determinants of Health, P. David, J.-M. Berthelot and C. Mustard (1993)*
59. *Extending Historical Comparability in Industrial Classification, John S. Crysdale (1993)*
60. *What is Happening to Earnings Inequality in Canada?, R. Morissette, J. Myles and G. Picot (June 1994)*

61. *Structural Change in the Canadian Manufacturing Sector, (1970-1990), J. Baldwin and M. Rafiquzzaman (July 1994)*
62. *Unemployment Insurance, Work Disincentives, and the Canadian Labour Market: An Overview, Miles Corak (January 1994)*
63. *Recent Youth Labour Market Experiences in Canada, Gordon Betcherman and René Morissette (July 1994)*
64. *A Comparison of Job Creation and Job Destruction in Canada and the United States, John Baldwin, Timothy Dunne and John Haltiwanger (July 1994)*
65. *What is Happening to Weekly Hours Worked in Canada?, René Morissette and Deborah Sunter (June 1994)*
66. *Divergent Inequalities -- Theory, Empirical Results and Prescriptions, Michael C. Wolfson (May 1995)*
67. *XEcon: An Experimental / Evolutionary Model of Economic Growth, Michael C. Wolfson (June 1995)*
68. *The Gender Earnings Gap Among Recent Postsecondary Graduates, 1984-92, Ted Wannell and Nathalie Caron (November 1994)*
69. *A Look at Employment-Equity Groups Among Recent Postsecondary Graduates: Visible Minorities, Aboriginal Peoples and the Activity Limited, Ted Wannell and Nathalie Caron (November 1994)*
70. *Employment Generation by Small Producers in the Canadian Manufacturing Sector, John R. Baldwin and Garnett Picot (November 1994)*
71. *Have Small Firms Created a Disproportionate Share of New Jobs in Canada? A Reassessment of the Facts, Garnett Picot, John Baldwin and Richard Dupuy (November 1994)*
72. *Selection Versus Evolutionary Adaptation: Learning and Post-Entry Performance, J. Baldwin and M. Rafiquzzaman (May 1995)*
73. *Business Strategies in Innovative and Non-Innovative Firms in Canada, J. Baldwin and J. Johnson (February 1995)*
74. *Human Capital Development and Innovation: The Case of Training in Small and Medium Sized-Firms, J. Baldwin and J. Johnson (March 1995)*
75. *Technology Use and Industrial Transformation: Empirical Perspectives, John Baldwin, Brent Diverty and David Sabourin (August 1995)*
76. *Innovation: The Key to Success in Small Firms, John R. Baldwin (February 1995)*
77. *The Missing Link: Data on the Demand side of Labour Markets, Lars Osberg (April 1995)*
78. *Restructuring in the Canadian Manufacturing Sector from 1970 to 1990: Industry and Regional Dimensions of Job Turnover, J. Baldwin and M. Rafiquzzaman (July 1995)*
79. *Human Capital and the Use of Time, Frank Jones (June 1995)*
80. *Why Has Inequality in Weekly Earnings Increased in Canada? René Morissette (July 1995)*
81. *Socio-Economic Statistics and Public Policy: A New Role For Microsimulation Modeling, Michael C. Wolfson (July 1995)*

82. *Social Transfers, Changing Family Structure, and Low Income Among Children* **Garnett Picot and John Myles** (September 1995)
83. *Alternative Measures of the Average Duration of Unemployment*, **Miles Corak and Andrew Heisz** (October 1995)
84. *The Duration of Unemployment: A User Guide*, **Miles Corak and Andrew Heisz** (December 1995)
84. *Advanced Technology Use in Manufacturing Establishments*, **John R. Baldwin and Brent Diverty** (November 1995)
85. *Technology Use, Training and Plant-Specific Knowledge in Manufacturing Establishments*, **John R. Baldwin, Tara Gray and Joanne Johnson** (December 1995)
87. *Productivity Growth, Plant Turnover and Restructuring in the Canadian Manufacturing Sector*, **John R. Baldwin** (November 1995)
88. *Were Small Producers the Engines of Growth in the Canadian Manufacturing Sector in the 1980s?*, **John R. Baldwin** (October 1996)
89. *The Intergenerational Income Mobility of Canadian Men*, **Miles Corak and Andrew Heisz** (January 1996)
90. *The Evolution of Payroll Taxes in Canada: 1961 - 1993*, **Zhengxi Lin, Garnett Picot and Charles Beach** (February 1996)
91. *Project on Matching Census 1986 Database and Manitoba Health Care Files: Private Households Component*, **Christian Houle, Jean-Marie Berthelot, Pierre David, Cam Mustard, D.Sc., Roos L, PhD and M.C. Wolfson, PhD** (March 1996)
92. *Technology-induced Wage Premia in Canadian Manufacturing Plants during the 1980s* **John Baldwin, Tara Gray and Joanne Johnson** (December 1996)
93. *Job Creation by Company Size Class: Concentration and Persistence of Job Gains and Losses in Canadian Companies*, **Garnett Picot and Richard Dupuy** (April 1996)
94. *Longitudinal Aspects of Earnings Inequality in Canada*, **René Morissette and Charles Bérubé** (July 1996)
95. *Changes in Job Tenure and Job Stability in Canada*, **Andrew Heisz** (November 1996)
96. *Are Canadians More Likely to Lose Their Jobs in the 1990s?* **Garnett Picot and Zhengxi Lin** (August 6, 1997)
97. *Unemployment in the Stock and Flow*, **Michael Baker, Miles Corak and Andrew Heisz** (September 1996)
98. *The Effect of Technology and Trade on Wage Differentials Between Nonproduction and Production Workers in Canadian Manufacturing*, by **John R. Baldwin and Mohammed Rafiquzzaman** (May 1998)
99. *Use of POHEM to Estimate Direct Medical Costs of Current Practice and New Treatments Associated with Lung Cancer in Canada*, **C. Houle, B. P. Will, J.-M. Berthelot, Dr. W.K. Evans** (May 1997)
100. *An Experimental Canadian Survey That Links Workplace Practices and Employee Outcomes: Why it is Needed and How it Works*, **Garnett Picot, Ted Wannell** (May 1997)
101. *In progress*

102. *Differences in Strategies and Performances of Different Types of Innovators*, by **John R. Baldwin and Joanne Johnson** (December 1997)
103. *Permanent Layoffs in Canada: Overview and Longitudinal Analysis* **Garnett Picot, Zhengxi Lin, and Wendy Pyper** (September, 1997)
104. *Working More? Working Less? What do Canadian Workers Prefer?*, **Marie Drolet and René Morissette** (May 20, 1997)
105. *In progress* (by John Baldwin)
106. *Job Turnover and Labour Market Adjustment in Ontario from 1978 to 1993*
by **Zhengxi Lin and Wendy Pyper** (1997)
107. *The Importance of Research and Development for Innovation in Small and Large Canadian Manufacturing Firms*, **John R. Baldwin** (September 24, 1997)
108. *International Competition and Industrial Performance: Allocative Efficiency, Productive Efficiency, and Turbulence*, **John R. Baldwin and Richard E. Caves** (October 1997)
109. *The Dimensions of Wage Inequality among Aboriginal Peoples*, **Rachel Bernier** (December 1997)
110. *Trickling Down or Fizzling Out? Economic Performance, Transfers, Inequality and Low Income*, **Myles Zyblock and Zhengxi Lin** (December 10, 1997)
111. *Corporate Financial Leverage: A Canada - U.S. Comparison, 1961-1996*, **Myles Zyblock** (December 1997)
112. *An explanation of the Increasing Age Premium*, **Constantine Kapsalis** (July 1998)
113. *The Intergenerational Earnings and Income Mobility of Canadian Men: Evidence from Longitudinal Income Tax Data* by **Miles Corak and Andrew Heisz** (September, 1998)
114. *Foreign-Born vs Native-Born Canadians: A Comparison of Their Inter-Provincial Labour Mobility*
Zhengxi Lin (September 1998)
115. *Living Arrangements and Residential Overcrowding: the situation of older immigrants in Canada, 1991*
by **K.G. Basavarajappa** (September 1998)
116. *What is Happening to Earnings Inequality and Youth Wages in the 1990s?* **Garnett Picot** (July 1998)
117. *The Determinants of the Adoption Lag for Advanced Manufacturing Technologies*,
John R. Baldwin and Mohammed Rafiquzzaman (August 1998)
118. *The Determinants of the Replacement of Manufacturing Technologies: The Role of Information Acquisition*,
John R. Baldwin and Mohammed Rafiquzzaman (August 1998)
119. *Technology Adoption: A Comparison Between Canada and the United States* **John R. Baldwin and David Sabourin** (August 1998)
120. *In progress* (John Baldwin)
121. *In progress* (John Baldwin)
122. *In progress* (John Baldwin, David Sabourin)

- 123. *In progress (John Baldwin)*
- 124. *New Views on Inequality Trends in Canada and the United States Michael C. Wolfson and Brian B. Murphy (August 1998)*
- 125. *Employment Insurance in Canada: Recent Trends and Policy Changes Zhengxi Lin (September 1998)*

